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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,764	11/25/2003	Stephane Bedard	14206/67101-B	4189

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EXAMINER

WILLSE, DAVID H

ART UNIT	PAPER NUMBER
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3738

MAIL DATE	DELIVERY MODE
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05/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,764

Applicant(s)

BEDARD ET AL.

Examiner

Dave Willse

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 4, 12, 13, 22 and 26-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11, 14-21, and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

The terminal disclaimer filed on January 3, 2007, disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of any patent granted on U.S. application serial no. 10/463,495 has been reviewed and is accepted. The terminal disclaimer has been recorded.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The further limitations of claim 21 appear to contradict the newly added limitations of claim 1 in that the “follower is connected to said *structural member*” (claim 21, lines 2-3; emphasis added), whereas the drive member, which includes the follower (claim 20), is “pivotally connected to said *primary joint member*” (claim 1, lines 13-14; emphasis added).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9, 15, and 19-21 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Ota, JP 2002-191654 A: English translation; Derwent abstract; Figures 1-4. The

term “prosthesis” is defined as a “[f]abricated substitute for a diseased or missing part of the body” (*Stedman’s Medical Dictionary*, 26th ed.: 1995). The Ota device is a substitute for a *diseased* leg in that it facilitates standing, walking, and the like (MPEP §§ 2111 and 2111.01). Moreover, the Derwent abstract specifically calls the Ota invention a “prosthetic leg” in several instances (title; abstract, lines 5, 7-8, and 9). Ota discloses a primary joint member **2** and pivot assembly **5**, a socket connector assembly **11** *capable* of connecting a socket to the primary joint member **2**, an elongated structural member or shank connected to a foot member **14** at one end, and a linear actuator **4**. The linear actuator **4** comprises a motor **6** and a drive member **7**, and as seen from the English translation at page 18, lines 5-7, the orientation of these two components may be reversed such that the motor **6** is mounted on the elongated structural member or shank and the socket **8** is affixed to the primary joint member **2** either directly or via the pivot connection **10**. In either case, there is a pivotal connection at the primary joint member **2** because the engagement of the drive member or ball thread **7** with the socket **8** is pivotal in nature, with “pivot” being defined as “a shaft or pin on which something turns” and “to turn on or as if on a pivot” (*Merriam Webster’s Collegiate Dictionary*, 10th ed.: 1996). Regarding claim 20 and the aforementioned pivotal connection, the follower can be viewed as the housing for the lower portions of the ball thread **7** (Figures 1 and 2).

Claims 16-18 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota, JP 2002-191654 A. Regarding claims 16-18, feedback signals from sensors or artificial proprioceptors mounted on the linear actuator **4** would have been obvious, if not inherent, from the wiring between components **13** and **25** as shown in Figure 3 and from the stated goal of “imparting a self-walking means to a walking impaired person” (JPO English abstract: lines 5-6).

Regarding claims 23-25, load sensors and optical relative motion sensors were well known in the art and would have been obvious in order to monitor the swing and weight bearing phases along with the bending of the knee (Derwent abstract: line 6).

Claims 1, 2, 15-21, and 24 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Artigue, EP 1 169 982 A1: English translation and drawings. Figure 1 illustrates a primary joint member **1**, an elongated structural member **2**, a connector assembly **8**, a pivot assembly **3**, a motor **10** (which is at least indirectly connected to the structural member **2**), and a drive member **4** pivotally connected to the primary joint member **1** at hinge connection **7** (page 8, lines 2-4, of said translation). Since the device can be used as a forearm (*ibid.*: page 7, lines 18-20) and since the prosthesis can include an (upper) arm component (*ibid.*: page 11, lines 7-10; Figure 4), the (upper) arm component or portions thereof can be equated with the “socket connector assembly” (instant claim 1, line 4); alternatively, a socket connector assembly atop the plate or primary joint member **1** would have been inherent in order to mount a residual limb socket onto the plate **1** for amputees requiring only forearm and hand prostheses. Regarding claims 15 and 16: page 5, paragraphs 0009 and 0010. Regarding claim 17: Figure 5; paragraph 0036 (pages 13-14). Regarding claim 18: page 14, paragraph 0038.

Claims 3, 5-9, 11, 14, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Artigue, EP 1 169 982 A1. Regarding claims 3 and 5, the structural member additionally including a cosmesis or shell would have been obvious for aesthetic purposes and in order to protect the components from the environment (and *vice versa*). Regarding claim 6, the cosmesis or shell having a detachable closure would have been obvious in order to provide access to the components for maintenance, adjustments, and the like. Regarding claim 9,

although the document specifies arm prostheses, adapting the device for lower limb prostheses would have been obvious to the ordinary practitioner in order to accommodate above knee amputees desiring myoelectric control of knee joint function. Regarding claims 23 and 25, load sensors and optical sensors would have been obvious for reasons similar to those presented above.

The Applicant's remarks have been considered and are adequately addressed in the grounds of rejection set forth above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Willse, whose telephone number is 571-272-4762 and who is generally available Monday through Thursday and often on Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be

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reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

A handwritten signature in black ink, appearing to read 'Dave Willse', with a stylized, cursive script.

Dave Willse
Primary Examiner
Art Unit 3738